

Field of the Invention

This invention belongs to the field of toys, especially a toy device to produce detonation by pressing a rubber film.

Background of the Invention

In the present air driving toy pistol or shooting bullet by air pressure or producing detonation by air driving, the effects are not good, and it is also not safe.

Summary of the Invention

The purpose of this invention is to provide a method using pressing air acting on rubber film, making it expand until it bursts, so that one can obtain a better visual and vocal effect, and suffers no harm.

The present invention includes a kind of detonation producing toy device utilizing air pressure, and includes a trigger mechanism, a rubber film, an air pump, a sealed body, a gunpoint and a rolling mechanism. When a trigger of the device is fired, the air pump and seal body are pushed to make the rubber film press on the gunpoint . The power is turned on and drives the air pump. Air is pressed to the rubber film, making it expand outwards of the gunpoint until it bursts. Upon release of the trigger, the power is off, and all parts recover, under the action of a recovering

spring. The trigger provides new rubber film to the gunpoint through the rolling mechanism driven by a gear, thus finishing the shooting process, and setting up a repeat of this process.

This interesting device is easy to operate, with simple structure, and with great safety.

Description of the Drawing

FIG 1 is special structural explanation of an example of the present invention.

Detailed Description of the Preferred Embodiment

The following is a detailed description of the best mode of the present invention with reference to the drawing:

As shown in the drawing, this invention includes: gun body 1, power switch 2, rubber film 3, trigger mechanism 4, air pump 5, reposition spring 6, air seal body 7, gunpoint 8, rolling mechanism 9, and battery power supply 10. Gunpoint 8 is connected with gun body 1. Power 10 is connected with air pump 5 through power switch 2, air. Air pump 5 is connected with air seal body 7, and glides in a slideway which is set in the gun body 1. Rolling mechanism 9 consists of a gear, a rack, a driver wheel and a driven wheel.

When practicing this invention, the trigger 4 is fired. A cam part of the trigger pushes the air pump 5 and air seal body 7 to gunpoint 8. Air seal body 7 clamps the rubber film piece which is in the middle between the air pump 5 and gunpoint 8 to form a round seal part. Trigger 4 presses power switch 2 to then drive air pump 5. The air from air pump 5 presses the rubber film in the round seal part between the air pump 5 and gunpoint 8 to pass through an air hole in the middle of the seal body 7. This makes the rubber film expand outwards of gunpoint 8 until it bursts, producing detonation, and finishing the shot. When the trigger is released, the power is off and the air pump stops its working. The trigger recovers under the action of reposition spring 6, and pushes the driver and driven wheels of rolling mechanism 9. This makes the detonated rubber film roll on the rolling mechanism, and pulls the new rubber film stored in the driven wheel 3 to the gunpoint position at the same time, and prepares for the next shot.

Rolling mechanism 9 does not connect with trigger mechanism, but connects with a gun bolt outside of the gun body 1. The gun bolt is used to work the rolling mechanism 9.